

Gerald P.Murphy *et al.* Application No. 09/016,737 **PATENT** 



## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 23. (Currently Amended) A composition comprising an isolated cell population having human dendritic cells, wherein said cell population has been cultured in the presence of granulocyte-macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4) and exposed in vitro to a soluble prostate antigen, the cell population having an increased number of human dendritic cells competent and able ability to activate T cells specific to the prostate antigen as compared to an a similar isolated cell population comprising the same number of cells cultured in the presence of granulocyte-macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4) that has not been exposed in vitro to the prostate antigen.
- 24. (Previously presented) The composition according to claim 23, in which the prostate antigen is a lysate of LNCaP cells, a membrane preparation of LNCaP cells, a lysate of prostate tumor cells from a prostate cancer patient, a membrane preparation of prostate tumor cells from a prostate cancer patient, isolated prostate specific membrane antigen (PSMA), purified prostate specific membrane antigen (PSMA), a peptide having the amino acid sequence LLHETDSAV (SEQ ID NO: 1), a peptide having the amino acid sequence ALFDIESKV (SEQ ID NO: 2), a peptide having the amino acid sequence XL(orM)XXXXXV(orL) (SEQ ID NO: 3), where X represents any amino acid, purified prostate specific antigen (PSA), or a purified prostate mucin antigen recognized by monoclonal antibody PD41.
- 26. (Original) The composition according to clam 23, in which the dendritic cells are extended life span dendritic cells.
- 28. (Previously presented) The composition according to claim 23, in which the dendritic cells have been cryopreserved prior to exposure in vitro to the prostate antigen, wherein said dendritic cells retain the ability to take up and present antigen.

- 29. (Previously presented) The composition according to claim 28, in which the prostate antigen is a lysate of LNCaP cells, a membrane preparation of LNCaP cells, a lysate of prostate tumor cells from a prostate cancer patient, a membrane preparation of prostate tumor cells from a prostate cancer patient, isolated prostate specific membrane antigen (PSMA), purified prostate specific membrane antigen (PSMA), a peptide having the amino acid sequence LLHETDSAV (SEQ. ID. NO. 1), a peptide having the amino acid sequence ALFDIESKV (SEQ. ID. NO. 2), a peptide having the amino acid sequence XL(orM)XXXXXV(orL) (SEQ. ID. NO. 3), where X represents any amino acid, purified prostate specific antigen (PSA), or a purified prostate mucin antigen recognized by monoclonal antibody PD41.
- 30. (Previously presented) The composition according to claim 28, in which the dendritic cells are extended life dendritic cells.
- 31. (Currently amended) The composition according to claim 23 comprising a cell population having at least 20 fold more, wherein said dendritic cells competent and able to can activate 2 to 3 fold more T cells specific to the prostate antigen as compared to an isolated cell population comprising the same number of cells cultured in the presence of granulocytemacrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4) that has not been exposed in vitro to the prostate antigen.
- 32. (Previously presented) The composition according to claim 23, wherein the human dendritic cells are immature dendritic cells.
- 33. (Previously presented) The composition according to claim 23, wherein the T cells are CD4<sup>+</sup>.
- 34. (Previously presented) The composition according to claim 23, wherein the T cells are CD8<sup>+</sup>.
- 35. (Previously presented) The composition according to claim 23, wherein the dendritic cells are isolated from a prostate cancer patient.

- 36. (Previously presented) The composition according to claim 23, wherein the dendritic cells are isolated from a normal individual.
- 37. (Previously presented) The composition according to claim 36, wherein the dendritic cells are HLA-matched for the a recipient.